

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004634**Date Inspected:** 17-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

**East Shaft Lift 1**

The Quality Assurance Inspector observed ZPMC continuing to work in the confined spaces. Caltrans Quality Assurance Inspectors have been instructed not to enter the confined space until further notice. ZPMC relayed that the fit up and tack welding operations were taking place between the diaphragms and skin E utilizing the shielded metal arc welding process. In addition ZPMC was observed removing temporary fitting aids from the jig utilizing the air carbon arc gouging process.

**South Shaft Lift 1**

The Quality Assurance Inspector observed ZPMC performing fit up and tack welding operations between several diaphragm plates and skin E utilizing the shielded metal arc welding process in the vertical and horizontal positions.

**South Shaft, Skin D, Lift 1**

Four ZPMC welders were in the process of welding the connection plate to longitudinal stiffener PJP welds in the horizontal position utilizing the flux cored arc welding process. Several ZPMC Quality Control employees were present monitoring parameters in accordance with WPS B-T-4332-TC-P5-F.

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## WELDING INSPECTION REPORT

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### South Shaft, Skin C, Lift 1

ZPMC was in the process of building up the longitudinal stiffeners and skin plate by welding (buttering) utilizing the flux cored arc welding process. ZPMC's internal weld repair report stated the amount of buttering would be 8 mm. QA observed as much as 15 mm. Below is a digital photograph illustrating the build up in progress.

### South Shaft, Skin A, Lift 2

ZPMC was in the process of assembling numerous 10 ton jacks in preparation for pre-camber and grinding tack welds.



### Summary of Conversations:

As stated in the contents of the above report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi 137.6471.0411 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bertlesman,Greg	Quality Assurance Inspector
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<b>Reviewed By:</b>	Wright,Mark	QA Reviewer
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